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9749 (NCRC-0044-US)

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10/10/2006

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EXAMINER

TO, BAOQUOC N

ART UNIT

PAPER NUMBER

2162

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,975

Applicant(s)

CHAWARE ET AL.

Examiner

Baoquoc N. To

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/30/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6, 10-13, 15-27, 30-33, 35-42, 46 and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-6, 10-13, 15-27, 30-33, 35-42, 46 and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 2-6, 10-13, 15-27, 30-33, 35-42 and 46-47 are pending in this application.

Response to Arguments

2. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-6, 10-13, 15-27, 30-33, 35-42 and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudhuri. (US. Patent 6,223,181 B1) in view of Toyoshima et al. (US. Patent No. 6,298,349 B1).

Regarding on claims 3 and 38, Chaudhuri teaches a method comprising:

Presenting a user interface in display of a test system (user interface allow the user to select indexes) (col. 6, lines 31-34);

Receiving user selection through the user interface selectable elements pertaining to environment information of a target database system to extract from the

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target database system (database server receive the indexes selection from the user) (col. 6, lines 40-41); and

Receiving, by the test system (210) (col. 5, line 44), the environment information extracted based on the user selection from the target system, wherein the test system is separate from the target database system (retrieving the indexes from the database server 220) (col. 6, lines 30-39).

Emulating the target database system in the test system using the received environment information (HCA engine 240 may be used to perform quantitative analysis of database system 200) (col. 8, lines 30-44).

Chaudhuri does not explicitly extracting the environment information, the environment information including at least a number of nodes of the target database system. However, Chaudhuri discloses the concept of selecting and retrieving indexes and database configuration from the database server (col. 6, lines 31-39). This suggests the concept of requesting the information from the server database system. On the other hand, Toyoshima teaches "in said system resource display apparatus of this invention, said managed device display means is responsive, for example, to selection of one of the user's name displayed by said information displayed means for retrieving said resource database using employee number or the like (keyword) included in personnel information data of the selected user, and displaying a list of the selected user's computer) (col. 3, lines 60-67). This suggests the number of selectable computers are the number of nodes to be extract from the network. Therefore, it would be obvious to one ordinary skill in the art at the time of the invention was made to

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modify Chaudhuri's system to include displaying the selected computer to be extract as taught in the Toyoshima in order to obtain the attributes of the target database for running the test.

Regarding on claims 4 and 30, Chaudhuri teaches presenting the user interface comprises presenting plural screens each containing at least a graphical user interface element that is user selectable (fig. 4).

Regarding on claim 5, Chaudhuri teaches presenting screens comprises presenting a screens comprises presenting a screen containing graphical user interface elements selectable by a user to select, for extraction, one of environment information associated with an entire database in the target database system and environment information associated with tables referenced by a query (select indexes) (fig. 4).

Regarding on claims 6 and 30, Chaudhuri teaches presenting the user interface comprises presenting user-selectable options corresponding to types of environment information to extract from the target database system (multiple selection icons) (fig. 4).

Regarding on claim 10, Chaudhuri teaches displaying the environment information in the user interface (fig. 4).

Regarding on claim 11, Chaudhuri teaches presenting the user interface comprises providing a user-selectable element that when activated enables editing of the environment information (fig. 4).

Regarding on claim 12, Chaudhuri teaches strong the received environment information in plural files (col. 10, lines 25-30).

Regarding on claim 13, Chaudhuri teaches presenting a user-selectable element that when activated causes the files to be combined (fig. 4).

Regarding on claim 15, Chaudhuri teaches the software is executable on the processor to export the environment information from the target database system (database management to export the indexes and database configuration form the database server to the personal computer for testing) (col. 6, lines 31-39).

Regarding on claim 16, Chaudhuri teaches the user interface comprises plural screens containing the user-selectable elements (fig. 4).

Regarding on claim 17, Chaudhuri teaches plural screens contains a first user-selectable element to indicate extraction of environment information associated with a database of the target database system (fig. 4).

Regarding on claim 18, Chaudhuri teaches another one of the plural screens contains a second user-selectable element to indicate extraction of environment information associated with one or more tables associated with a query in the target database system (fig. 4).

Regarding on claim 19, Chaudhuri teaches the other one of the plural screens comprises a query selection element to select one or plural queries for which environment information is to be extracted (col. 23, lines 58-60).

Regarding on claim 20, Chaudhuri teaches the query selection element enables selection of the one or more plural queries from a file (col. 6, lines 31-32).

Regarding on claim 21, Chaudhuri teaches the query selection element enables selection of the one or more plural queries from a query capture database (col. 6, lines 31-32).

Regarding on claim 22, Chaudhuri teaches the user-selectable element indicate one or more types of environment information to export (fig. 4).

Regarding on claim 23, Chaudhuri teaches the one or more types of environment information comprises one or more of the following: statistic information, cost information, information pertaining to definition of relation (col. 6, lines 45-49)), and samples of data demographic of access modules in the target database system.

Regarding on claim 24, Chaudhuri teaches the user-selectable elements comprise an element to enable editing of the environment information (col. 6, lines 25-30).

Regarding on claim 25, Chaudhuri teaches the user-selectable elements further comprises another element to undo editing of the environment information (col. 6, lines 25-30).

Regarding on claim 26, Chaudhuri teaches the software is executable to display the environment information in the display (fig. 4).

Regarding on claim 27, Chaudhuri teaches is executable to export the environment information from the target database system and subsequently to import the environment information to a test system (database management 200 import the indexes and database configuration to a personal computer 120 for testing) (col. 6, lines 31-39).

Regarding on claim 32, Chaudhuri teaches presenting the screens comprises presenting a screen containing graphical user interface elements selectable by a user to select, for extraction, environment information associated with tables referenced by a query (fig. 4).

Regarding on claim 33, Chaudhuri teaches receiving the environment information comprises receiving at least one of the following information: number of nodes in the target database system, number of processor per node, statistic, and random samples pertaining to data demographics of data stored in the target database system (database size) (col. 8, lines 21-31)

Regarding on claim 35, 39 and 46, Chaudhuri teaches generating an execution plan for a query based on an emulated database environment created by emulating the target system (col. 7, lines 23-39).

Regarding on claim 36, 40 and 47, Chaudhuri teaches visually display displaying steps of the execution plan in the user interface (col. 8, lines 34-40).

Regarding on claims 37, 41 Chaudhuri teaches the emulated database environment comprises plural storage modules and plural access module processors to access, in parallel, respective storage module, wherein generating the execution plan comprises plan comprises generating the execution plan for execution by the plural access module processors (col.4, lines 40-45).

Claim 42 is an article recited the same limitation as to claim 3, therefore, it is rejected under the same reason as to claim 3.

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Regarding on claim 46, Chaudhuri teaches an article comprising at least one storage medium containing instruction that when execute cause the first system to:

Presenting a user interface (interface allow the user to select) (fig. 4);

Receiving the environment information extracted based on the environment information (retrieving the indexes from the database server 220) (col. 6, lines 30-39);
and

Emulating the target database system based on the environment information (HCA engine 240 may be used to perform quantitative analysis of database system 200) (col. 30-44).

generate an execution plan for a query based on an emulated database environment created by emulating the target database system (the effectiveness of a given indexes for one embodiment is based on cost estimate as determined by query optimizer 224 to execute queries of workload file 202 against database 210 using the set of indexes) (col. 6, lines 45-49).

Chaudhuri does not explicitly teach receiving user selection made in the user interface indicating environment information to extract a target database system separate from the first system. However, Chaudhuri discloses the concept of selecting and retrieving indexes and configuration of the data from the database server (col. 6, lines 31-39). This suggests the concept of requesting the information from the server database system. On the other hand, Toyoshima teaches "in said system resource display apparatus of this invention, said managed device display means is responsive, for example, to selection of one of the user's name displayed by said information

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displayed means for retrieving said resource database using employee number or the like (keyword) included in personnel information data of the selected user, and displaying a list of the selected user's computer) (col. 3, lines 60-67). This suggests the number of selectable computers are the number of nodes to be extract from the network. Therefore, it would be obvious to one ordinary skill in the art at the time of the invention was made to modify chaudhuri's system to include displaying the selected computer to be extract as taught in the Toyoshima in order to obtain the attributes of the target database for running the test.

Regarding on claim 47, Chaudhuri discloses the article of claim 46, wherein the instruction when executed cause the first system to display steps of the execution plan in the user interface (col. 6, lines 45-49)

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

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The fax numbers for the organization where this application or proceeding is assigned are as follow:

(571) -273-8300

[Official Communication]

BQ To

October 1st, 2006



JEAN M. CORRIELUS
PRIMARY EXAMINER